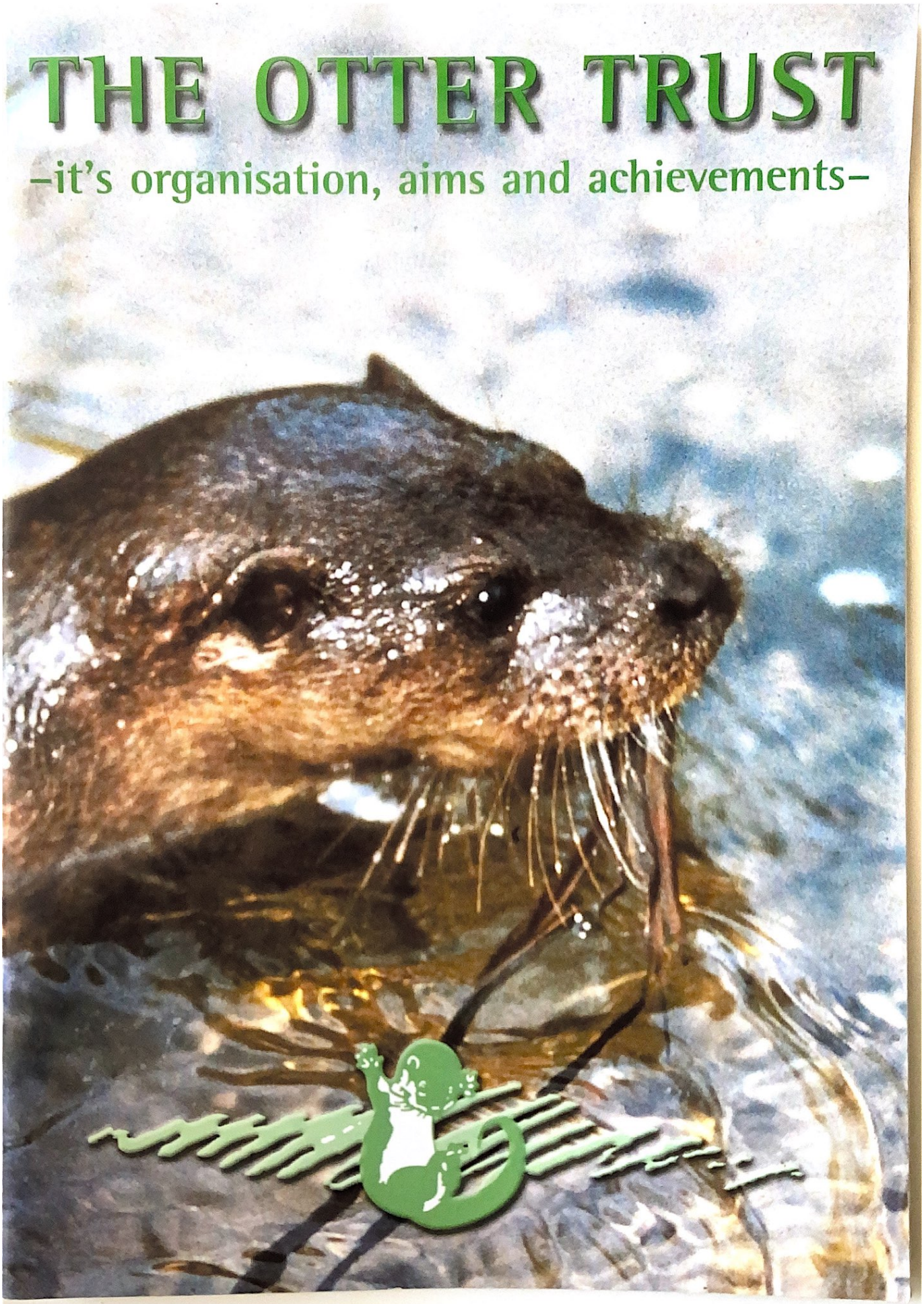
THE OTTER TRUST

–it's organisation, aims and achievements–



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– it's organisation, aims and achievements –

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All the Otter Trust's Centres are open to the public
daily from 1 April to 31 October 10.30am - 6pm

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Introduction

The Otter Trust is a registered charity and was founded by Philip and Jeanne Wayre in 1971. After searching for several years for a suitable site upon which to set up the Trust's headquarters and keep its collection of otters they purchased River Farm at Earsham near Bungay in 1975. The collection of otters which you can see there is the largest in the world.

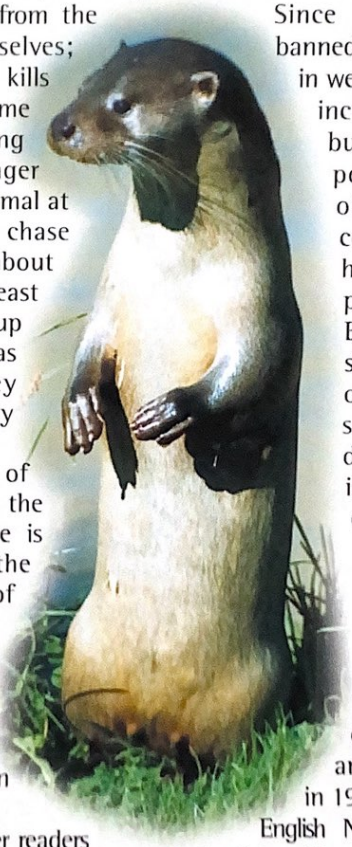
In several countries of Europe notably the Netherlands, Belgium, France and Germany the number of otters has declined alarmingly since the 1970s and 80s and in many areas it is on the verge of extinction. The otter's position in England and Wales was so critical 20 years ago that it was added to the list of animals protected by law. Today the position is not quite so serious. The natural population in the extreme west of England and Wales which survived the low point of the 1970s and 80s is now increasing slowly naturally while in the east of the country, thanks to the Otter Trust's reintroduction programme, the otter population is burgeoning and moving towards the west. The position in Scotland is satisfactory particularly along the west coast and in the outer islands.

The purpose of this book is to tell you something about the Otter Trust, the work that it does and the success that it has had over the past 25 years. The Trust is the oldest and largest Otter conservation body in the UK and apart from its highly successful reintroduction programme it has been actively involved in practical conservation since its foundation. The Trust employs scientific staff to carry out this work and they are ably supported by a number of dedicated volunteers. Their work includes otter population surveys and research.

The Trust has always been active in rousing public support for any legislation likely to protect otters and other wetland wildlife. Education is an important aspect of the Trust's work and interpretive centres have been set up at each of its three branches. They are particularly geared to our young visitors and to visiting school parties. The Trust's interests are not confined to otters, but include conservation of all wildlife associated with wetlands and other areas where otters are also found. To achieve these aims the Trust owns and manages five wildlife reserves and is always ready to purchase other sites as and when they come onto the market.

The background to the Otter Trust's re-introduction programme

When the Otter Trust was founded by Jeanne and Philip Wayre in 1972, the outlook for the otter in England was bleak. Nothing was known for sure because no systematic surveys had been carried out, but the anecdotal evidence pointed to a steep decline in otter numbers. While many considered that hunting was responsible, ironically the best data came from the otter hunts themselves; finds were down, kills were down and some hunts were claiming that they no longer killed the hunted animal at the end of the chase because of concern about their numbers. At least one hunt had given up altogether as early as 1957 because they were having too many blank days.



With the benefit of the 1990's hindsight the cause of the decline is thought to be the combined effects of habitat destruction, pollution of rivers since early 19th century industrialisation, hunting and trapping of vermin by gamekeepers.

It is easy for younger readers to condemn those responsible because the enormous change in attitudes in the last 40-50 years is rarely appreciated, heroes of boys adventure books of the late 1940's could well be big game hunters - the more elephants killed the greater the heroism. All of these factors could explain the gradual and irregular decline in otter numbers since the 18th century, but not the steep decline, particularly in the south and east of England, which started at the beginning of the 1970s. While the possibility of pollution by the organo-chlorine insecticides introduced to agriculture in 1955 had long been recognised and partial bans introduced as early as 1962, it took much longer for the conclusive evidence to be assembled leading to a total ban of these substances in 1981.

Since hunting had been banned in 1978 otter numbers in western areas started to increase quite early on, but in the east with potentially the best otter rivers in the country the situation had gone beyond the point of no return. By 1981 surveys had shown that East Anglian otter numbers were so low and the individual survivors so isolated that scientists considered that the otter population of East Anglia would become extinct. This did not happen solely because of the Otter Trust's re-introduction of captive bred animals which started in 1983 with the support of English Nature (then called the Nature Conservancy Council) and has continued annually since then. Otters now thrive on virtually all of East Anglia's rivers and are spreading into neighbouring counties. They could not have spread to East Anglia from the far west because the areas between the two regions were (and to a large extent still are) devoid of otters except where reintroductions have taken place.

It doesn't just happen

The Otter Trust's reintroduction programme is believed to be one of only 5 captive breeding programmes actually successfully returning an endangered species to the wild (Caughley 1994). This success has not happened by chance, but as a result of over a quarter of a century of preparation, research, very considerable effort and a lot of money.

Eleven years elapsed between the founding of the Trust and the first release. During this time a suitable site had to be found to breed otters in far greater numbers than had ever been contemplated before. The breeding programme itself took seven years from the time that otters first arrived at Earsham from Philip Wayre's Norfolk Wildlife Park, to the time numbers were large enough for the first animals to be released in 1983. This lengthy period to build up stocks is a consequence of the otter's low rate of reproduction, typical of many carnivores at the top of their food chain. A bitch will be ready to breed at 2 and in the wild may well be dead of old age by 5 or 6. Gestation takes 2 months and cubs stay with their mother for up to a year so the maximum number of litters is probably 3. Each litter will be of one, two or three cubs, so the maximum potential is probably 6 cubs per bitch. Juvenile mortality is high in the wild, but it is not normally a problem in the right captive breeding conditions.

Given these numbers it is fortunate that year round availability of prey means that otters can breed at any time of year. At the Trust bitches frequently live and breed far longer than in the wild; the oldest breeding to date is by a bitch aged 13.

The Trust's conservation staff had much to do while waiting for the first otters to become available for release. One of the major reasons for the decline in otter numbers was the loss of habitat along and near rivers brought about by modern farming methods. Therefore Trust staff spent considerable time locating areas where suitable habitat remained and then persuading riparian landowners to establish otter havens on or near their riverbanks. Landowners mainly in Norfolk and Suffolk were extremely co-operative.

An Otter on its way to a release site. The Animal is transported in its usual sleeping box to avoid any stress which might be caused by having to catch it.

The Ideal Site

Playful British Otters

It is, surprisingly, not essential that the release site is actually in good otter habitat; but it is essential that it is near to it. This is because (a) an otter has a territory of at least 12 - 15 km of main river plus associated ditches, dykes and streams and (b) the short term release site and the long term territory have different priorities.

The release site must be quiet and yet have reasonable access for a vehicle, be guaranteed free from interference by humans or dogs, be near the river and have a flat and reasonably level area with a perimeter of about 70m with grass or other vegetation that can be mown to around a centimetre in height or treated with weedkiller so that the lowest electrified strand of the netting forming the release pen does not short to earth. The Trust supplies food in the form of frozen fish so access to a large freezer is necessary. The most important requirement is for a dedicated and long suffering landowner or agent!

The release river must have good water quality with a good record of freedom from accidental discharges of pollutants. There must be plenty of coarse fish, preferably including eels, and local angling clubs must be in agreement with a proposed release. There must also be plenty of dense cover on or near the river. The existence of Mink hunts unwilling to forego drawing the river would be of considerable concern.

How are the Otters trained for release?

The brief answer is that they aren't. Otters manage to combine a shy secretive nature with an overwhelming curiosity; exposed to public attention in the exhibition pens there is an obvious danger that the latter characteristic would dominate to an extent that would threaten the otters' lives in the wild. To prevent this possibility cubs destined for release are taken from their mothers at around ten months and put in large pre-release enclosures (built with the aid of a grant from the Worldwide Fund for Nature) well away from the public and with vegetation that is left largely unmanaged. Apart from daily feeding and the necessarily restricted size of their territory, the young otters are allowed to live here almost naturally until they are ready for release. They frequently ignore the holt boxes provided for their comfort and protection and sleep in couches they have created or underground holts they have dug themselves. With the rare exception of a cub that has had to be hand-reared, none of the Trust's otters is in any sense tame although they know where their food comes from!

It is illegal to feed live prey to captive otters so that the young animals destined for release do not have any experience of hunting living quarry other than the odd fish which may swim into their enclosure from the river. However scientists have shown that captive-bred otters with no previous hunting experience will immediately pursue and capture live fish given the chance. Once the young otters have been set free they are supplied with food at the release site for as long as they return for it at night. However they usually fail to return after only a few days by which time they are obviously catching their own quarry.

British Otters perform their courtship in the water

The moment of truth

British Otter

Preparations for a successful release include the insertion of a tiny AVID microchip underneath the skin of each otter destined to be set free. Each of these chips has an individual number so that should the otter become a road casualty or die from some other cause an examination of its body will show whether it is a released animal and if so which particular individual.

In recent years blood samples have been taken from all otters prior to their release and sent to Aberdeen University for DNA analysis and recording. Preliminary results confirm the successful colonisation by released otters and the spread of their progeny into adjacent watersheds.

The young otters are taken in their regular holt box to the release site, usually a pair or three animals at a time. They spend the next 2-3 weeks in a temporary enclosure of electrified rabbit netting, still living in their familiar box and being fed daily by the landowner or by a local volunteer. This period allows them to become familiar with the sights, sounds and smells of their new territory. After that time one side of the release pen is rolled back and the otters are free to go.

One landowner who hosted a release recently had the great good fortune to be able to watch the otters he had just set free repeatedly sliding down the spill-way of a small weir conveniently located at the bottom of his short riverside lawn. Bright moonlight added something special to this sight from his bedroom window.

Was it worth it?

It would have been pointless and cruel to continue releasing captive bred otters if they were unable to thrive in the wild. Therefore it was vital to monitor the progress of the first releases in 1983 and 1984. Prior to that scientists from the Nature Conservancy Council (now English Nature) had developed and tried out a harness which carried a small radio transmitter and was designed to fall off after 6-7 weeks. This was achieved by using rivets of a metal which would rust through in that time. The male from the first release was tracked for 44 nights and a lot was learned about the movements of an otter gradually extending its knowledge of its new territory. Other scientists had caught wild otters in Scotland and fitted similar transmitters to follow their subsequent movements. Both groups were found to behave in very similar ways reassuring the Trust that captive bred animals were able to adapt quickly to life in the wild and to follow the traditional lifestyle of a wild bred otter.Subsequent releases have not been radio tracked, mainly because it involves some disruption, not justified by the extra data that would be obtained.

Otters always seem to be attracted by bridges, particularly where there is a sill just above the water level, running underneath the bridge. This is one of their favourite places to deposit spraint or droppings which are used to mark their territory. Large numbers of people, mainly volunteers from some County Wildlife Trusts, conduct regular surveys of such bridges looking for the distinctive footprints and spraints either beneath the bridge or nearby. These surveys have shown a very large increase in the number of sites having positive signs of otters in recent years particularly in Norfolk, Suffolk, Cambridgeshire and Essex. Originally the Otter Trust releases were concentrated in Norfolk and Suffolk, but their offspring are known to have spread to Cambridgeshire and Essex. More recently releases have been made throughout eastern England.

Another professional survey carried out at 7 year intervals by the Vincent Wildlife Trust in alternate 50km squares over the whole of England has also shown a progressive and marked improvement and demonstrated that in the words of the editors of the report (Strachan and Jefferies 1996) "The only way known to speed up recovery and increase area population size rapidly is by releasing captive-bred or rehabilitated animals."

The release pens are made of electrified rabbit netting and placed near the river at the release site.

Summary of the success of the re-introduction project 1983-1999

Since 1983 the Otter Trust, working in conjunction with English Nature and certain County Wildlife Trusts, has bred and released 117 otters. The majority of these animals have been reintroduced into the eastern half of England, but releases have also been made in the south of the country and in 1999 into the headwaters of the River Thames where 17 animals bred by the Trust were re-introduced. Independent surveys have shown that these releases have been remarkably successful and the otter population of East Anglia is now virtually back to normal with otters being found on every river system, while elsewhere in eastern England the population is also expanding rapidly.

The progeny of the released animals are now colonising the whole of eastern England and slowly

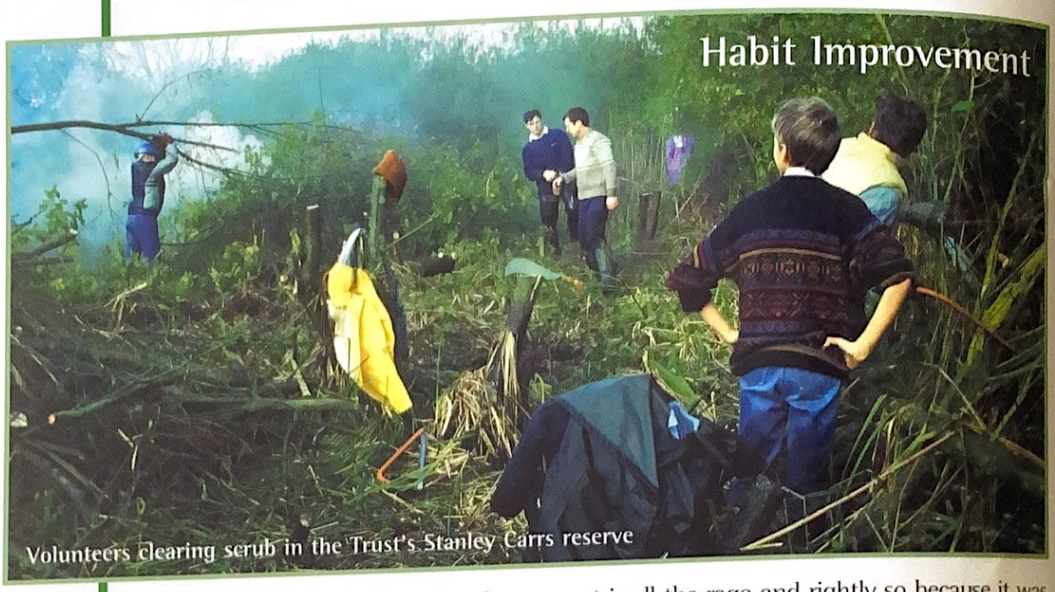
but surely moving into the Midlands on their progress towards the west. With the population in the extreme west of England recovering naturally it is hoped that the two populations will eventually meet somewhere in the middle of the country and the otter will be found virtually throughout lowland England.

The Otter Trust's release programme is one of only five known projects where a mammal has been bred in captivity and successfully released into the wild to boost a population threatened with extinction. Commenting on this project the authors of the Otter Survey of England 1991-94 (Strachan & Jefferies 1996) said the wild native stock (in Norfolk and Suffolk) decreased and became almost completely extinct by 1984-86. The steadily increasing importance of captive bred stock from 1983 onwards is easily discernible. There is no doubt whatever that the otter owes its strong position in eastern England today entirely to the Otter Trust's reintroduction programme.

The River Walk at Earsham in the grip of winter frost

The Otter Trust's other conservation work

Habit Improvement



Volunteers clearing scrub in the Trust's Stanley Carrs reserve

These days habitat enhancement is all the rage and rightly so because it was the destruction of suitable habitat which played an important part in the decline of the otter population in lowland England. This destruction was largely the result of changing farming methods and intensification not only of arable land but of grassland as well. The removal of hedges and trees, the draining of marshy areas to create large prairie-like arable fields and the ploughing up and reseeding of pasture and its replacement with rye grass coupled with heavy applications of nitrogenous fertiliser resulted in swards which, whilst producing heavy crops of grass for hay and silage, were of little or no value to wildlife. The resulting destruction of the English countryside as it was up to the 1960s has resulted in the decline of all forms of wildlife including several species of birds which were dependent on farmland and which are now rapidly declining in numbers.

These days much is made of habitat enhancement which the Environment Agency and the Wildlife Trusts are committed to carrying out. It remains to be seen how successful the new campaign will be. The Otter Trust was one of the first organisations to recognise the potential damage which modern farming might cause and as long ago as 1976 its staff began an intensive campaign to persuade landowners to create otter havens or sanctuaries on their land. Thanks to the work of these pioneers Norfolk soon had the most comprehensive system of otter havens anywhere in the United Kingdom. After three years of effort the Trust had set up 252 otter havens or sanctuaries involving 261 riparian owners on 11 river systems in Norfolk alone. Each haven was safeguarded by a management agreement entered into by the landowner and the Trust. It says much for the riparian owners of the eastern counties that so many of them entered willingly into the scheme. Many of these havens are still in existence today and have played an important part in the return of the otter to these counties. There is nothing new in habitat improvement and it is something which demands urgent attention from all conservation organisations if we are not to lose the majority of our wildlife and turn lowland England into a sterile and featureless desert of intensive agriculture. Only a reform of the Common Agricultural Policy, which at present encourages farmers to intensify and overproduce almost all forms of agricultural produce, can save the situation. If the CAP can be reformed so that it encourages environmentally friendly farming and rewards farmers

who care for the environment and its wildlife there may still be time to save the situation.

Otter surveys and research

Since its foundation in 1972 the Otter Trust has regularly conducted otter surveys and has contributed to similar work being carried out by the Country Wildlife Trusts and other organisations. As a glance at the bibliography in this publication shows, Trust staff have also been very active in the field of otter research.

Education

Education has always played an important role in the aims of the Otter Trust. Educational packs are available for visiting school parties and there are well equipped interpretative/education centres at both the Trust's headquarters at Earsham and at its North Pennines Reserve where a new building has been specially built for this purpose. In both these centres while the emphasis is on otters and otter conservation, the local wildlife had not been overlooked and there are many exhibits devoted to it as well as interactive displays aimed at stirring the imagination of younger children. At the Tamar Otter Sanctuary there is an area of the main visitor centre set aside for educational purposes and displays.

Politics and the law

The Otter Trust has always played a significant role in influencing public opinion and lobbying MPs wherever conservation issues have arisen which were likely to have an effect on otters and wetland wildlife in general. The Trust lent its support to the Nature Conservancy Council when in 1978 it added the otter to schedule 1 of the Conservation of Wild Creatures and Wild Plants Act 1975. More complete protection was afforded by the otter's later inclusion in Schedules 5 and 6 of the Wildlife and Countryside Act 1981. This protected otters throughout England, Wales and Scotland and came into force in 1982. Under this Act it is an offence intentionally to kill, injure or take an otter except under licence or intentionally to damage, destroy or obstruct access to its holt or to disturb it whilst occupying that holt. This was not an easy measure to get through both Houses of Parliament. The Otter Trust played a significant role in lobbying MPs and in whipping up public support. There was a good deal of opposition particularly from supporters of hunting in the House of Lords who felt that since otter hunting would become illegal it might be the thin end of the wedge and that eventually a move would be made to ban hunting in general. That was never the intention of the Act. Suffice to say that in the end good sense prevailed and the otter was at last protected.

Female British Otter with well grown cubs photographed at the Otter Trust

Accidental Mortality

Road Mortality

The otter has no natural enemies in this country except for man and road casualties account for more otter deaths than any other single cause. Furthermore as the otter population increases the number of road casualties will inevitably rise. It is difficult to find any means by which such accidents can be reduced and various methods have been tried including reflectors, short lengths of fencing near accident highspots and otter underpasses where regular routes taken by otters at night cross a road and deaths have occurred on a fairly regular basis. Otters often leave the water and run across a road rather than swimming under a bridge especially when the water is very high and they then run the risk of being hit by a car. Underpasses in such places have sometimes proved successful. The first such underpass to be installed in England was carried out by the Otter Trust and the local Highway Authority as early as 1977. It was built beneath the main A149 coast road in North Norfolk just to the west of the village of Cley where the otters' traditional path crossed the road near the mouth of the River Glaven. Several otters had been killed in this particular spot over a period of years and the Norfolk Highway Authority co-operated with the Trust to sink a concrete pipe 330mm in diameter beneath the road just above the level of the river and slightly to one side of the bridge. It is believed to have been successful in that no further otter casualties have occurred there. More recent experience seems to indicate that such underpasses are more likely to be successful if there is a larger diameter pipe and if the otter can see daylight at the far end of the tunnel.

Fyke Nets

Unfortunately modern eel fyke nets, set in long chains in rivers and estuaries have proved to be very effective at catching and drowning otters and the number of such casualties is large. These nets are used all the year round for catching eels and especially between September and November for catching silver eels on migration to the sea. The nets also attract otters when they have eels in the cod-end. The otter searching for a way to get at them finds the outer funnel entrance, swims inside through the second funnel and is then unable to escape and is drowned.

Research carried out by a committee of otter conservationists, fisheries scientists and an eel net manufacturer coordinated by the Vincent Wildlife Trust produced a fyke net entrance guard which allows acceptable catches of eels, but prevents an otter from entering a net. These have been manufactured in large numbers and are in use in most Environment Agency Regions although unfortunately not all regions insist on their use and fyke nets which are set illegally rarely have guards on them so that otter mortality continues.The Otter Trust keeps a supply of these guards which are made of a non-rusting metal alloy and supplies them free of charge to any eel netsman requiring them.

Otters are also caught and drowned in crab and lobster pots set around rocky coasts close inshore but the number is not large when compared with the mortality caused by fyke nets. Unfortunately only female otters and young males are small enough to pass through the funnels of the pots and the loss of breeding females is particularly serious especially in areas where there are few otters.

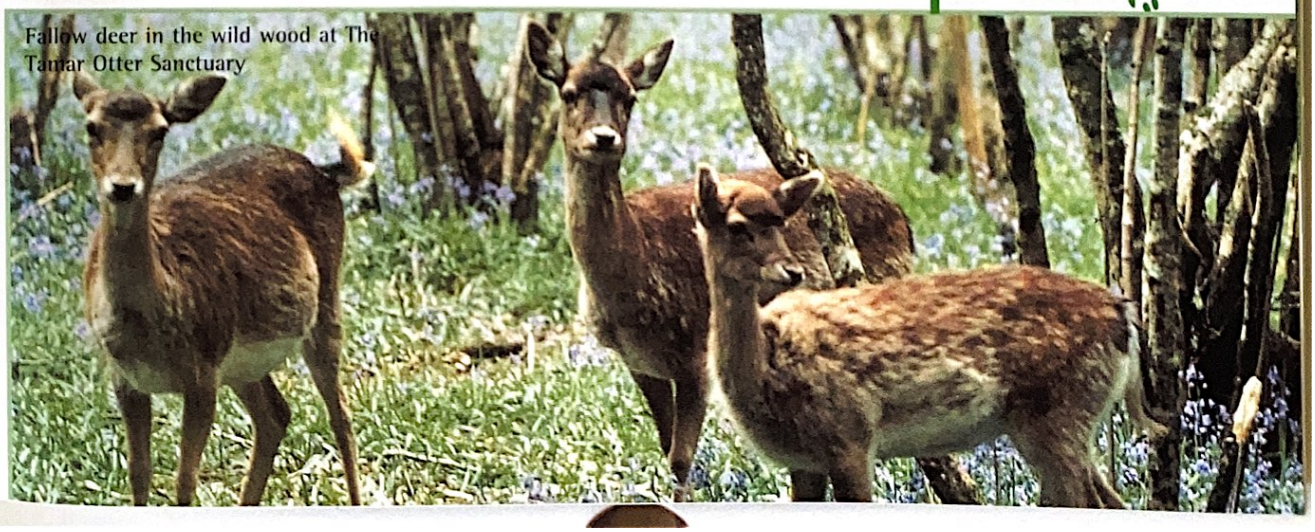
Otter Trust's Reserves

In addition to its other work the Otter Trust is always ready to safeguard important areas of habitat through the purchase of land to be maintained as nature reserves.

The Trust already owns and manages three wetland reserves in East Anglia upon which otters are present. The first of these is Stanley Carrs reserve at Aldeby. This is an SSSI (Site of Special Scientific Interest) and consists of 42 acres of alder swamp adjacent to the river Waveney. Apart from otters this reserve, which is part of a much larger area of alder carr, is an important site for many species of birds. Sparrowhawks and Woodcock nest here while there is also a rich diversity of wild plants and invertebrates. The Trust is indebted to the Broads Authority and the Environment Agency for the help both organisations have given in the maintenance of this important reserve over the past few years. Thanks to them large areas of invading scrub have been cleared, bridges have been repaired and dykes which have not been touched for more than fifty years have been cleaned out, all in the interests of improved wildlife habitat. In parts of the reserve the ground is so boggy and the alder carr so impenetrable that the only means of access for management purposes is by using a shallow-draft boat along the dykes.

The Trust's second reserve in East Anglia is at Swangey Fen near Attleborough, an area of 47 acres of valley fen, a type of habitat extremely rare in eastern England today. This reserve lies alongside the river Thet and is regularly visited by otters. In addition to its wealth of other wildlife, especially birds, plants and invertebrates, both Roe and Red Deer are regularly found here. Volunteer working parties from BTCV (British Trust for Conservation Volunteers), a school and individuals have made major contributions to the management of the reserve.

Over the years large areas of open fen have been colonised by alder, ash, birch and sallow, blocking the light and drying out the peat. It is also probable that nearby boreholes have contributed to the drying out. The aim of the management programme is to restore the open fen conditions that prevailed 100 years ago when peat was dug and wood removed to provide fuel for the poor of the area. Reed was cut to provide animal bedding and in the resulting wet, low nutrient peat and good light, rushes, orchids and many different sedges thrived. A major grant from English Nature enabled us to remove a lot of invading trees in the winter of 1998-9. We also hope to restore the baulks (raised tracks left between areas of peat diggings, presumably once used to carry the fuel off the fen) to improve access in the wetter months and retain more of the water in the late spring and summer. Shallow ponds, typical of those left by past peat digging, will be dug to further increase the similarity to conditions 100 years ago.

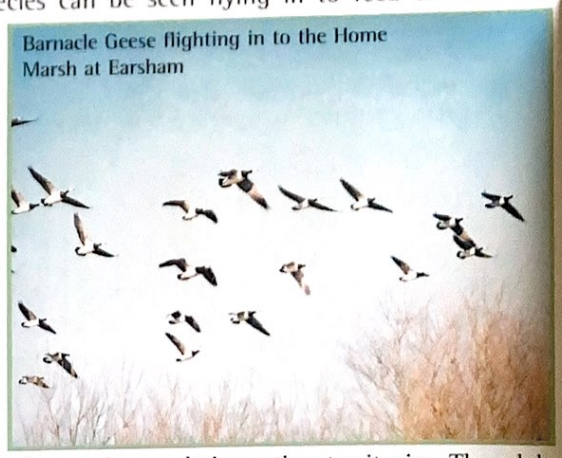


Fallow deer in the wild wood at The Tamar Otter Sanctuary

Otter Trust Reserves
(continued)

Earsham

The marshes at the Trust's headquarters at Earsham can claim to be a wildlife reserve in their own right. During the summer breeding species here include Mallard, Tufted Duck, Pochard, Shelduck and Oystercatcher. During the winter months the marshes are home to visiting flocks of Mallard, Widgeon, Shoveller and Shelduck and at times many hundreds of these species can be seen flying in to feed on the food provided for them. One of the most spectacular sights at Earsham is the Trust's free-flying flock of Barnacle Geese which now numbers over 150 birds. During the winter the flock often leaves the safety of the Trust's grounds and we are not sure where they go but believe the may go down to the coast. Early in the spring they are always back again to take up their nesting territories. The adults are extremely protective of their goslings and from May onwards family groups can be seen all over the marshes with goslings of various ages being escorted by noisy parents. In early autumn when the young birds first start flying the flock becomes restless and repeatedly circles round high in the air over the marshes when the concerted clamour is reminiscent of the saltings of the Solway Firth and other areas in western Scotland where this species normally winters.

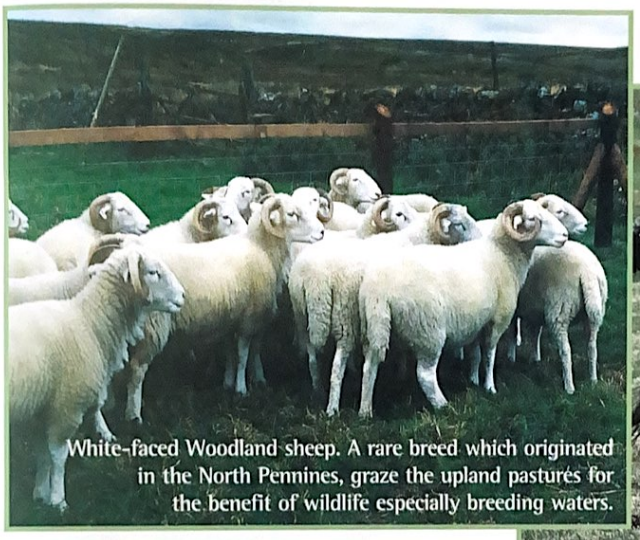

Barnacle Geese flighting in to the Home Marsh at Earsham


An exhibit in the new Visitor Centre explaining the relationship between wildlife and the new plantations

Bowes

More recently the Trust has acquired an upland farm of some 230 acres on the edge of Bowes Moor in County Durham. Lying at an altitude of nearly 1000 feet this is entirely different from lowland otter habitat. The fields slope gently down to a valley bottom through which the River Greta runs. Land on both sides of the river supports a rich diversity of wildlife especially birds and plants. The farm is part of the Ministry of Agriculture and Fisheries Farm Stewardship Scheme which means that it must be farmed in the best interests of wildlife. To this end the Trust manages the whole area as a nature reserve and is improving the conservation value of the uplands by light grazing and by allowing certain areas to revert to grass and heather moor. This is a most attractive reserve and is already home to such species as Curlew, Mallard, Teal, English Partridge and most importantly BlackGrouse.

The Trust is part of a partnership with English Nature, the RSPB and the Game Conservancy Trust in a coordinated effort to build up numbers of this species which is threatened with extinction in England. As a result of changes in land management three broods of Black Grouse were hatched and successfully reared on this reserve in 1999 and it is hoped to improve on that figure. Merlins, rare little falcons, breed on nearby Bowes Moor and are regular visitors to the reserve.



White-faced Woodland sheep. A rare breed which originated in the North Pennines, graze the upland pastures for the benefit of wildlife especially breeding waters.

Exmoor Ponies and Red Deer are used for conservation grazing purposes at the Otter Trust's North Pennines Reserve

Tamar

The Trust's West Country branch, the Tamar Otter Sanctuary is an entirely different kind of reserve. Nestling in a sheltered combe there are, in addition to the otter breeding enclosures, two lakes which attract a wide variety of waterfowl, but most importantly the reserve consists of over 20 acres of ancient deciduous woodland. There are magnificent oak, beech and holly trees all of which attract a wide variety of nesting birds during the summer months. Bolesbridge Water runs down one side of the woodland through a marshy area which has a particularly rich diversity of unusual plants and extensive areas of hazelnut bushes. These are home to that most attractive of little rodents, the Dormouse. This is rather a rare animal and special efforts are made to encourage it and to safeguard the existing population. To this end more than 100 Dormouse nest boxes have been made and put up by staff at the Sanctuary.

Otter breeding enclosures at The Tamar Otter Sanctuary

In addition to the small herd of Fallow Deer at liberty in the wood there is a particularly rich ground flora and in spring the whole wood is carpeted with Bluebells, Primroses, Violets and Wood Anemones. In addition to nestboxes for birds, bat boxes have also been situated high up on some of the trees. Foxes, badgers and grey squirrels all live wild in this wood as well as numerous smaller species.

Natural History of the European Otter

European Otter under water

Shy, silent and secretive, the otter is perhaps the most elusive and mysterious of British wild mammals. the European or British Otter *Lutra l. lutra* is a member of the *mustelidae*, a family which includes pine martens, stoats, weasels, polecats and badgers. In all the members of this family the male is larger than the female. Adult male otters measure up to 120 cm (48 in.) or even more in length, while females are usually considerably smaller. A male or dog otter can weigh up to 14 kg (30 lb.) although the average is probably nearer 10.3 kg (23 lb.).A bitch or female otter may reach 12.3 kg (27 lb..) with 7.4 kg (16 lb.) about average.

The otter's eyes and ears are small but it has strong sensitive whiskers or vibrissae on each side of the snout and below the chin. Its valvular nostrils can be closed at will when the animal dives beneath the surface of the water. As in other members of the family like polecats, the otter has two small scent glands at the base of the rudder or tail. These produce a strong-smelling fluid and are used to mark the otter's territory.

Its feet are broad and rounded with five widely-separated toes on each, though all five may not show up clearly in an otter's footprint or seal as it is sometimes called. As would be expected in an animal which spends so much time in the water, the otter's coat is dense and waterproof. It consists of two layers, a short velvety undercoat and a top coat of long stiff guard hairs. When the animal is on land, air is trapped between these two layers and acts as insulation when the otter dives.

Then some of the air is forced out leaving a chain of bubbles which rise to the surface showing just where the otter is swimming underwater.

Every otter has its home range or territory, and on a typical smallish lowland river a dog otter may claim as much as 20 km (12.5 miles) of river for his territory. A bitch otter needs less space - up to 14 km (8.5 miles) of river, and this means that a dog may have more than one bitch otter in his area.

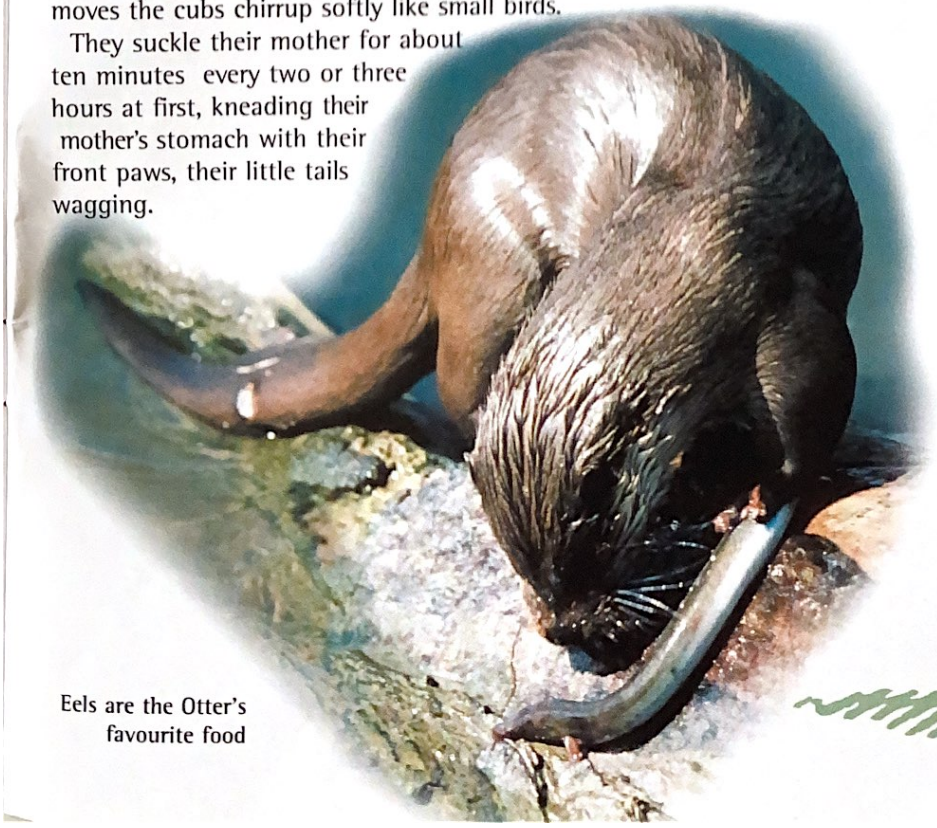
An adult otter probably needs at least 1.0 to 1.5 kg (2 to 3 lb.) of food each night and this may be one of the reasons why an otter requires such a large territory. If it always fished in the same stretch of river it would soon wipe out its own food supply, so otters are constantly on the move, rarely fishing in the same area for more than a night or two.

They sometimes catch salmon and trout but scientists have shown that in rivers where these fish are found as well as coarse fish, salmon and trout account for less then ten per cent of the otter's food, the other ninety per cent being coarse fish. Eels eat a lot of salmon and trout fry and as otters like eels best of all they help rather than harm the fisherman. Bitch otters are able to breed by the time they are two years old while dog otters reach maturity sooner.

When a bitch is ready to mate she gives off a characteristic scent and is very interested in the sprainting places, visiting them frequently as she moves about her territory. In this way the dog otter soon picks up the scent and finds her. Mating takes place in the water and the cubs are born nine weeks later. By this time the bitch will have made a holt or burrow in the river bank, often among the roots of a sycamore or ash tree. Occasionally bitch otters enlarge a rabbit hole or have their cubs in a cave amongst rocks.

If the cubs are born in a burrow or holt the bitch otter will have lined the nest chamber with reeds, grass and waterside vegetation. When they are born otter cubs are about 10 cms (4 ins) long and covered with pale grey, velvety fur. Their little square muzzles, tiny ear orifices and miniature pads are all bright salmon pink and their eyes are shut. Whenever the bitch otter moves the cubs chirrup softly like small birds.

They suckle their mother for about ten minutes every two or three hours at first, kneading their mother's stomach with their front paws, their little tails wagging.



Eels are the Otter's favourite food

The cubs grow slowly; at first they can only just crawl; their eyes open when they are about five weeks old (30-35 days) and by the time they are seven weeks old they weigh about 1kg and can run quite well, if unsteadily. At about this time they begin to nibble the fish which the female otter brings into the holt and soon they venture outside for the first time to deposit their spraint nearby. Up to then the bitch otter has kept them clean by licking up their droppings.

At ten weeks the cubs begin to follow their mother and to play rough and tumble games near the holt. By then they are eating fish regularly, but will continue to suckle until they are over three months old. The otter is a rather silent animal, although it can make a variety of noises of which the most well known is the so-called whistle. This is really an ultra-high pitched squeak which carries a long way and which is a contact call. Cubs use it a great deal when separated from each other or from their mother. It means, 'Here I am, where are you?' Perhaps the commonest sound is the huff, a kind of snort which is really a question mark. Otters do this when they are curious about something and it is quite a gentle noise.

A much harsher, louder snort is a threat and is made when an otter is angry and about to bite or fight. If provoked the snort turns into a low growl which gets louder and higher in pitch until it becomes a scream of rage. One of the gentlest noises made by otters is a kind of low, quiet whikkering. This is a greeting and is often made by a bitch when returning to her cubs.

A European or British Otter in the evening sun

Come and meet the Otters at the

Otter Trust's Centres

The Otter Trust is the only organisation breeding British Otters regularly in captivity and releasing the young animals into the wild every year to save the otter from extinction in Britain. To date more than 100 otters bred at the Otter Trust have been set free.

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• The Trust's headquarters set in 30 acres of attractive grounds alongside the River Waveney •British and Asian Otters • Three lakes • Large collection of waterfowl, wallabies and deer roaming free.

The Tamar Otter Sanctuary, North Petherwin, Nr Launceston, Cornwall PL15 8LW Tel. 01566 785646

• British and Asian Otters • Two lakes with large collection of waterfowl • 20 acres of mature woodland in which three species of deer roam free.

The Otter Trust's North Pennines Reserve, Bowes, Barnard Castle, County Durham DL12 9RH Tel 01833 628339

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All the Otter Trust's centres have free car parking, gift shops and cafes selling light refreshments.

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